



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,435	08/31/2001	David Grant Midkiff	15,780	1854

23556 7590 08/21/2007  
KIMBERLY-CLARK WORLDWIDE, INC.  
Catherine E. Wolf  
401 NORTH LAKE STREET  
NEENAH, WI 54956

EXAMINER
----------

KURTZ, BENJAMIN M

ART UNIT	PAPER NUMBER
----------	--------------

1723

MAIL DATE	DELIVERY MODE
-----------	---------------

08/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

o

<b>Office Action Summary</b>	<b>Application No.</b> 09/944,435	<b>Applicant(s)</b> MIDKIFF ET AL.	
	<b>Examiner</b> Benjamin Kurtz	<b>Art Unit</b> 1723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 5,12,13,22,24,26 and 28-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,7-11,14-21,23,25 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/01,1/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 28-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/13/07.

Claims 5, 12, 13, 22, 24 and 26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/13/07. Applicant indicated claims 5, 13 and 22 as withdrawn. Claims 12, 24, and 26 are also withdrawn as they are drawn to a separate specie: in claim 12 the rigidifying component acts as an adhesive, and in claims 24 and 26 the stiffening component also acts as an adhesive.

### ***Information Disclosure Statement***

2. The information disclosure statement filed 1/28/03 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. The international search report for IA No. PCT/US02/18735 has not been submitted.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "the filaments having asymmetrical cross-sectional shapes". There is insufficient antecedent basis for this limitation in the claim. For examination purposes claim 17 is assumed to depend from claim 16.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 9-11, 14, 15, 18-21, 25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Fritz EP 0 980 700 A2.

Regarding claim 1, Fritz teaches a composite structure comprising: a first nonwoven layer (230) having a first surface and a second surface opposite the first surface, and a rigidifying component (210) applied to one surface of the nonwoven layer, wherein the rigidifying component provides sufficient stiffness to the composite such that the structure can be self-pleatable yet maintain flexibility (fig. 2, paragraph 51).

Regarding claims 2, 3, 9-11, 14, 15 and 18, Fritz further teaches the rigidifying component comprises filaments of a polymer, said filaments having a cross-sectional shape (fig. 2, paragraph 17 and 51); the rigidifying component comprises polymer

Art Unit: 1723

filaments having a diameter of at least about 0.004 inches (100 dpf ~ 0.005 inches (paragraph 22); wherein the rigidifying component is selectively applied to the structure (fig. 2); the structure further comprises a second nonwoven layer (fig. 3, 5); wherein the second nonwoven layer is positioned adjacent to the first layer (paragraph 29, lines 50-55); the nonwoven layers are comprised of a spunbond web, melt-blown web, or bonded carded web (paragraph 28); the filaments of the nonwoven layers have a variety of cross-sectional shapes (paragraph 34); and the composite is a filter media (paragraph 1).

Regarding claims 16 and 17, Fritz further teaches the filaments of the nonwoven layers have asymmetrical cross-sectional shapes (paragraph 41 and 42). Claim 17 is a recitation of intended use and it is unclear how it adds a further structural limitation.

Regarding claim 19, Fritz teaches a filter media comprising: a first layer of nonwoven material (230) and a stiffening component (210) applied to the material, wherein the filter media is self-pleatable, and wherein the stiffening component provides sufficient resilience to the filter media to maintain the pleats (fig. 2, paragraph 14).

Regarding claims 20, 21, 25 and 27, Fritz further teaches a second layer of nonwoven material (fig. 3, 5); the stiffening component comprises filaments of a polymer, the filaments having a cross-sectional shape (fig. 2, paragraph 17 and 51); the first and second nonwoven layers are adjacent to each other and the stiffening component is applied to either the first or the second nonwoven layer (paragraph 29, lines 50-55); and the nonwoven layers are comprised of a spunbond web, melt-blown web, or bonded carded web (paragraph 28)

Art Unit: 1723

5. Claims 1, 2, 6-9, 18, 19 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Wyss EP 0 726 348 A1.

Regarding claim 1, Wyss teaches a composite structure comprising: a first nonwoven layer having a first surface and a second surface opposite the first surface, and a rigidifying component applied to one surface of the nonwoven layer, wherein the rigidifying component provides sufficient stiffness to the composite such that the structure can be self-pleatable yet maintain flexibility (pg. 2, line 40, pg. 3, lines 7-13 and lines 35-39).

Regarding claims 2, 6-9 and 18, Wyss further teaches the rigidifying component comprises filaments of a polymer, the filaments having a cross sectional shape (pg. 3, lines 7-13); the rigidifying component further includes a filler material in an amount between about 30-50% by weight (pg. 3, lines 18-23); the rigidifying component is selectively applied to the structure (pg. 3, lines 5-6); and the composite is a filter media (pg. 2, lines 3-4).

Regarding claim 19, Wyss teaches a filter media comprising: a first layer of nonwoven material and a stiffening component applied to the material, wherein the filter media is self-pleatable, and wherein the stiffening component provides sufficient resilience to the filter media to maintain the pleats (pg. 2, line 40, pg. 3, lines 7-13 and lines 35-39).

Regarding claim 23 Wyss further teaches the rigidifying component further includes a filler material (pg. 3, lines 18-23).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fritz '700. Fritz teaches the composite of claim 1 but does not teach the polymer filaments having a diameter of about 0.04 – 0.12 inches. [W]here the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device, *Gardner v. TEC Systems, Inc.*, 220 USPQ 777 (1984). Absent a showing of secondary evidence that the claimed dimension of the filament diameter is critical it is deemed an obvious alternative to the filament diameter taught by Fritz because a larger diameter would not inhibit the flow of fluid through the filter.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin Kurtz whose telephone number is 571-272-8211. The examiner can normally be reached on Monday through Friday 8:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin Kurtz  
Patent Examiner  
Art Unit 1723

8/16/07

A handwritten signature in black ink, appearing to read 'K. Menon', with a stylized flourish at the end.

**KRISHNAN MENON**  
**PRIMARY EXAMINER**